AMENDMENTS TO THE DRAWINGS:

The attached sheet of drawings includes amendments to Figs. 3 and 4. These sheets replace the original sheets containing Figs. 3 and 4. In Figs. 3 and 4, previously omitted reference characters have been added.

Attachment: Replacement Sheets
Annotated Sheets Showing Changes

REMARKS

Claims 1-10 are presented. Claim is independent, and each of the other claims depends directly or indirectly on claim 1. Claim 10 is a new claim that recites an optional gear through which the driving shaft communicates with the synchronous generator. The recitation of the optional gear has been deleted from claim 1. The claims have been amended as necessary to overcome all of the rejections and are now in condition for allowance.

The objection to Figs. 3 and 4 is overcome by amendment of those figures to contain labels identifying the shown parts of the claimed invention and their structural relationships.

The specification has been amended to correct some minor errors and to refer to the amended drawings.

Applicant agrees with the suggestion to adopt a more descriptive title. Applicant proposes "WIND POWER PLANT HAVING MAGNETIC FIELD ADJUSTMENT ACCORDING TO ROTATON SPEED" as being properly descriptive. Approval of the new title is respectfully requested.

Claim 1 is objected to because of crossed-out and handwritten words. But a smooth copy of claim 1 was presented in the international application. In any event, claim 1 as amended above overcomes the objection.

Claims 1-9 are rejected under 35 U.S.C. 112 second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. Claim 1 has been amended to recite "a driving shaft," and claims 1, 7 and 9 have been amended to avoid the terms "n" and "relatively high speed." Accordingly, withdrawal of the rejection under 35 U.S.C. 112, second paragraph, is respectfully requested.

Claims 1-9 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. patent No. 5,083,039 to Richardson, et al. in view of U.S. patent No. 4,926,105 to Mischenko, et al. The Office action recognizes that Richardson fails as an anticipation of the invention as claimed in the present application. In particular, as noted in the Office action on page 4, Richardson fails to disclose a magnetic field controller that varies the magnetic field in a synchronous generator in response to a speed of rotation-depending output parameter of the generator in such a manner as to compensate for variations in the speed of rotation, wherein the AC/DC rectifier is composed of diodes; detects voltages generated by the synchronous generator and produces a negative feedback for regulating the current through rotor winding; and detects the power generated by the generator and uses negative feedback to regulate the current through the rotor winding, including a combination of P, I or D regulation.

But the Office action contends in a passage on pages 4 and 5 that Mischenko makes up for these deficiencies and that the two patents together would have led a person having ordinary skill on the art to the present invention as claimed in the application.

The rejection is respectfully traversed.

The claims as amended and resubmitted clearly avoid the rejection.

Claim 1, the only independent claim, is directed to a wind power plant wherein a driving shaft communicates with a synchronous generator and with a transformer with a number of output windings. The transformer communicates through an AC/DC rectifier with an HDVC transmission cable. Measures are taken so as to secure against possible variations in the speed of rotation. A magnetic field controller is connected to the generator. The magnetic field controller is adapted to vary the magnetic field in the synchronous generator in

response to a speed of rotation-depending output parameter of the generator in such a manner that possible variations in the speed of rotation are compensated for. The AC/DC rectifier is composed of diodes, which is a rather simple construction.

The invention as defined in the amended claims is neither disclosed nor suggested by the documents relied upon.

Richardson is not anticipatory by itself as it fails to disclose, among other things, a magnetic field controller connected to the generator.

Richardson discloses an AC induction generator. The preferred embodiment uses a four-pole squirrel-cage induction generator, as disclosed at 14:52-53. Seemingly as an afterthought, the specification mentions at 19:13-15 that the generator could possibly be a synchronous generator. The person reading this patent would gain very little instruction relevant to the present invention, which is directed to a synchronous generator characterized in the manner set out in the claims of the application.

Mischenko meanwhile shows, beginning with its title ("Method of induction motor control and electrical drive realizing this method"), that it is concerned not with synchronous generators but with induction motors. The patent notes at 1:8-16 that it relates to squirrel-cage induction motors suitable for use in powering robotic tools. It explains at 1:18-26 that there are problems in using asynchronous or induction motors in the applications of interest. It explains in a passage beginning at 2:25 that induction motors had not been use in robot technology because the problem of control had not been solved. It explains in passage beginning at 2:50 that if the disadvantages of induction motors could only be eliminated, the use of induction motors in robotics would appear to be "extremely promising and advisable since it is at least ten times cheaper than DC/AC motors featuring high-efficiency permanent

magnets made of rare earth metals." The patent explains at the top of column 73 that in order to maintain the torque of the induction motor at the same level with variations in rotor speed, it is necessary to change the synchronous frequency.

Mischenko concerns a rather complicated motor control system using a transvector inverter in connection with a pulse width modulation. A magnetic filed controller connected to the generator has been mentioned. However, the specification does not show AC/DC converter or AC/DC converter composed of diodes, only single phase frequency current invertors 51, 52, cf. Fig. 9 and 71: 6-10.

The whole point of Mischenko is to get away from the use of synchronous motors in robotics and to show a method whereby induction or asynchronous motors can be substituted.

There is no particular reason to incorporate Mischenko's motor in Richardson's generator. And even if those teaching were combined, the result would be an asynchronous motor or asynchronous generator and would not respond to the language of the amended claims.

Richardson in combination with Mischenko is therefore not anticipatory.

According to the invention, there is provided a magnetic field controller which is much simpler than previously known, and which the prior art neither discloses nor suggests.

For the reasons stated, the application is now in condition for allowance. Issuance of a notice of allowance is respectfully respected.

Respectfully submitted,
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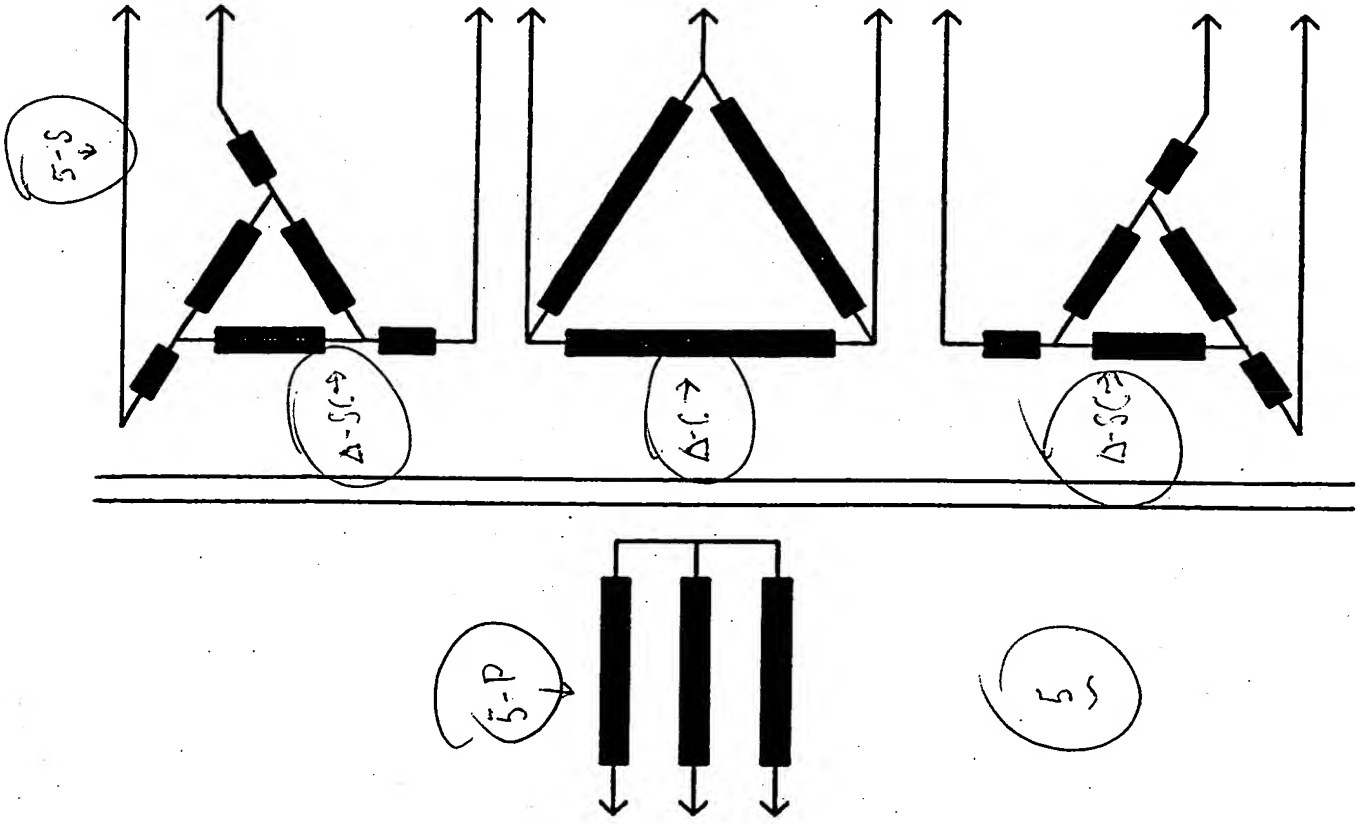
Fig 3



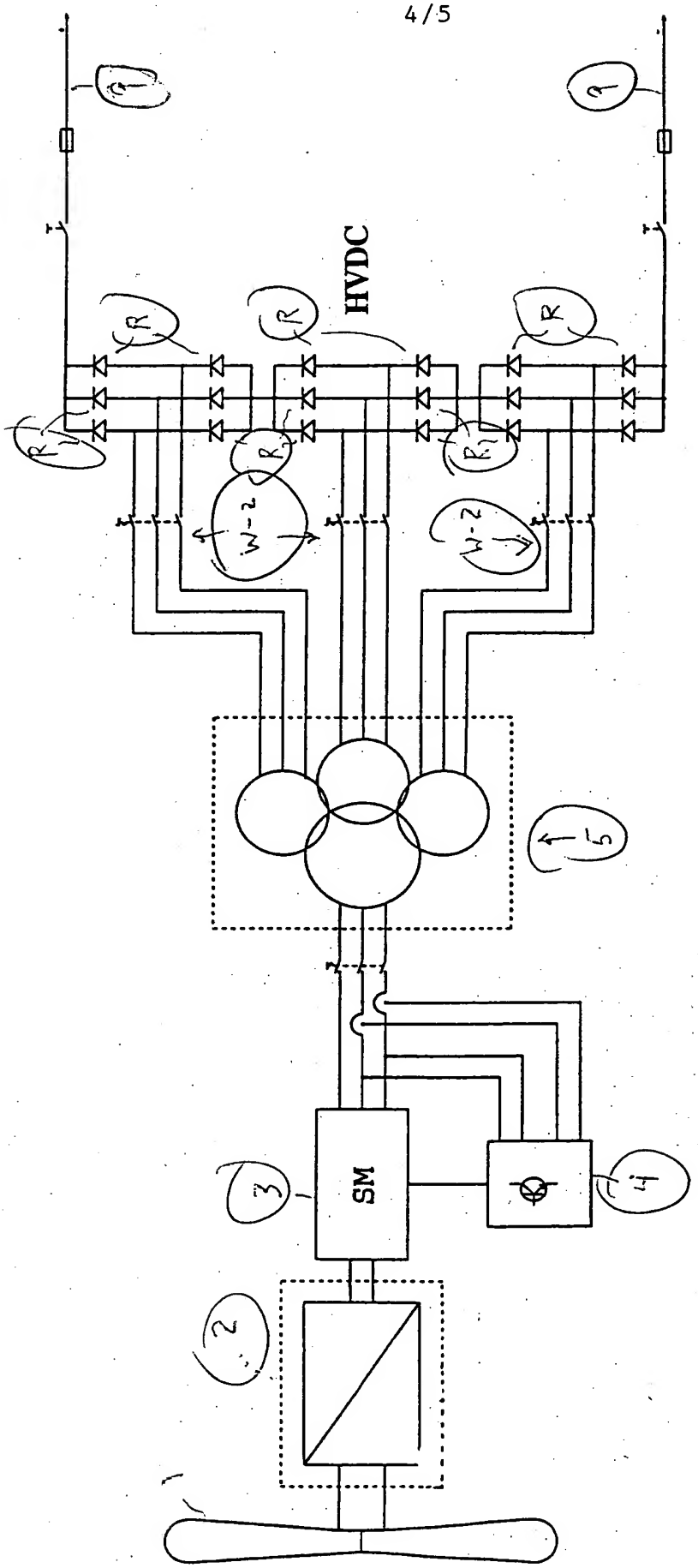


Fig 4